Universal ribbon element-module for two or more membrane-widths with optimized flow and drive.

SUMMARY

The described invention refers to a new type of loudspeaker module in the form of a ribbon element, designed in such a way that the module can be optionally equipped with a membrane, 50 millimeters in width or narrower, and with any length from 50 millimeters to 2500 millimeters. In the case were the module shall utilize a more narrow ribbon, elongated field concentrating pole shoes are mounted between the magnets and the ribbon. In that way a higher efficiency is achieved and also the risk of edge reflection is reduced. It is furthermore advantageous if the module's soft iron pole pieces, contrary to established practice are mounted along the sides of the magnets in such a way that the membrane is allowed to radiate freely forwards as well as backwards.

It is preferred that the magnet system is equipped with so called booster-magnets in order to reduce loss of magnetic flow in the soft iron pole pieces and in order to equalize and in order to even the magnetic flow at the magnet ends. It is furthermore preferred that the signal-feed is designed in the form of passive current-feeding, whereby the inductance's negative impact of the frequency response up to the 1/f point is eliminated.

Above the 1/f point, the ribbon membrane is compensation fed from a separate circuit consisting of R and C, whose values have been chosen in such a way that the resulting frequency response in flat over the whole operating area.